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DATE MAILED: 12/13/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,140	12/07/2004	Yuichi Inada	59559.00016	6829
32294	7590 12/13/2005		EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			HECKENBERG JR, DONALD H	
14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			ART UNIT	PAPER NUMBER
			1722	

Please find below and/or attached an Office communication concerning this application or proceeding.

The MAILING DATE of this communication app Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute,	Y IS SET TO EXPIRE 3 MONTH ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti	(S) OR THIRTY (30) DAYS, N.
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Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	, cause the application to become ABANDONI	n the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on		
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.	
3) Since this application is in condition for allowar	nce except for formal matters, pr	osecution as to the merits is
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	.53 O.G. 213.
Disposition of Claims		
4) ☐ Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-11 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.	
Application Papers		
9)☑ The specification is objected to by the Examine 10)☑ The drawing(s) filed on <u>07 December 2004</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	re: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ol	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	tion No red in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date —.	4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 6) Other:	

the application. Appropriate correction is required.

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2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 8, 10, and 11 are rejected under 35
U.S.C. 102(b) as being anticipated by Japanese Pub. No. 10000626 (previously made of record in the I.D.S. filed by
Applicant; hereinafter "JP '626"). Reference below will be to
the drawings of JP '626, as well as the English abstract and
computer translation made of record with this Office Action.

JP '626 discloses a method for molding a disc substrate and molding machine equipped with a disc mold for performing the method. The mold comprises a first support member and a first disc-shaped member (5) attached to the first support member (see Fig. 2). A second support member is provided, with a second disc-shaped member attached to the second support member (see

Fig. 1). The second disc-shaped member faces the first disc-shaped member to form a cavity space in cooperation with the first disc-shaped member when the disc-molding mold is clamped (see for example, translation \P 3 and Fig. 1).

JP '626 further provides a medium flow passage (12) for temperature control formed in each of the first and second disc-shaped members (see Fig. 1). A stamper (4) is removably attached to the first disc-shaped member (Fig. 1).

JP '626 notes that a heat insulator (13) is provided on the first disc-shaped member (Fig. 2). The heat insulator includes sections running from the center to the outer portion of the mold, including sections in the vicinity of the outer peripheral edge (see Fig. 2). The heat insulator is thicker in the vicinity of the outer peripheral edge of the first disc-shaped member. As a result of the inclusion of the heat insulator between the cavity and the medium flow passage on the first disc-shaped member, the cooling capacity of the medium flow passage in the first disc shaped member is inherently lower than the cooling capacity of the medium flow passage of the non-stamper side disc-shaped member.

JP '626 still further discloses the medium cooling passage on both disc-shaped members to include portions at a greater depth than other portions (see Fig. 1). As the heat insulating

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member extends from throughout the length of the mold, the medium flow passage in the second disc-shaped member has a greater depth in the vicinity of the heat insulating member as compared with other section of the medium flow passage.

Claim 10 recites a "molded product molded by the use of the disc-molding mold according to claim 1." Written as such, this claim is in product by process form. The determination of patentability in product by process claims is based on the product itself. The patentability of a product does not depend on its method of production. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985); In re Brown, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972); In re Pilkington, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969); MPEP § 2113. Thus, in the instant case, claim 10 merely defines a disc-shaped molded product. JP '626 in disclosing a disc-molding machine and method of using such, inherently discloses a disc-shaped molded product as well.

4. Claims 1-8, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sandstrom et al. (U.S. Pat. App. Pub. 2002/0058084).

Sandstrom discloses an optical disk mold tooling. The mold comprises first and second disc-shaped members (44 and 46).

Such disc-shaped members inherently have to be platen-type first and second support members. Medium flow passages for temperature control are formed in both the first and second disc-shaped mold members (Fig. 6). A stamper (62) is removably attached to the second disc-shaped member (46). In the vicinity of the outer peripheral edge of the second disc-shaped member, the cooling capacity of the medium flow passage is lowered due to the presence of a heat insulating section (68). In some embodiments, the heat insulating section is formed by a closed chamber filled with hot oil or water (see Figs. 14-17 and ¶¶ 75-78).

Claim 4 of the instant application defines that the heat insulating section is formed by "a closed chamber filled with air." As the claims of the instant application are written in open-ended "comprising" terminology, reciting that the chamber is "filled with air" does not exclude other elements from being present in the chamber. Sandstrom discloses another embodiment of the mold wherein the heat insulating section (68) includes an annular chamber (107) that includes a resistive heater (see Figs. 12 & 13 and ¶¶ 73 and 74). As shown in Fig. 13, the chamber is not completely filled by the heater. Any space in the chamber not taken up by the heater is inherently "filled with air", thus anticipating the limitation of claim 4.

As noted above in the rejection in view of JP '626, claim 10 is a product by process that merely define a disc-shaped molded product. Sandstrom discloses a molded disc-shaped product (Fig. 1), and thus anticipates claim 10.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Heckenberg whose telephone number is (571) 272-1131. The examiner can normally be reached on Monday through Friday from 9:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith, can be reached at (571) 272-1166. The official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov. Should you have questions

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on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at (866) 217-9197 (toll-free).

12.10.5

Donald Heckenberg Primary Examiner

A.U. 1722